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10/724,327	11/28/2003	Allen Hall	SVL920030040US1	9960
7590		06/22/2007		
Gregory M. Plow IBM Corporation Intellectual Property Law 555 Bailey Avenue (J46/G4) San Jose, CA 95141			EXAMINER DAO, THUY CHAN	
			ART UNIT	PAPER NUMBER
			2192	
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			06/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/724,327	Applicant(s) HALL, ALLEN	
	Examiner Thuy Dao	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-8 and 11-13 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,9 and 10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6,8 and 13 is/are rejected.
- 7) ☒ Claim(s) 4-5,7,11-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the amendment filed on March 29, 2007.
2. Claims 1, 4-8, and 11-13 have been examined.

Response to Amendments

3. Per Applicant's request, claims 1, 4-6, 8, and 11-13 have been amended and claims 2-3 and 9-10 have been canceled.
4. The 35 USC §112, second paragraph rejection over claim 6 is withdrawn in view of Applicant's amendments.
5. The 35 USC §101 rejection over claim 13 is withdrawn in view of Applicant's amendments.

Response to Arguments

6. The Applicant is thanked for a thorough reply. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Specification

7. The abstract of the disclosure is objected to because of minor informalities. The phrase in line 1 is considered to read as - -A system for monitoring a computer [[application]] software system includes ... - - as recited in claims and specification.

Correction is required. See MPEP § 608.01(b).

8. The specification is objected to because of minor informalities: acronyms should be spelled out at the first appearance (e.g., page 1, "DASD"; page 6, "TTTTOLIM", "TTTDSpsz"; page 9, "IS", "TTTSTATS"; page 15, "HIMDHDS"; page 16, "HIMDCTT", "CCPS").

Appropriate correction is required.

Claim Rejections – 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1, 6, 8, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Tuning Garbage Collection for Java and WebSphere on iSeries" to Arnold (art made of record, hereinafter "iSeries-Arnold") in view of "Domino for iSeries Sizing and Performance Tuning" to Blankertz et al. (art made of record, hereinafter "iSeries-Blankertz").

Claim 1:

iSeries-Arnold discloses *a method for monitoring a computer software system by reading log records written by said software system to determine performance of said software system relative to response time to end users (e.g., page 3, Figure 1, Sample Trace Profile Output, related text in pp.2-3), comprising:*

adjustably tuning performance evaluation bias computer software monitoring system between processor and memory consumption (e.g., page 8, Table 1, Rule of Thumb for initial heap size and numbers of processors, related text in page 8);

responsive to said bias, monitoring performance of said computer software system with respect to transaction time parameters including said response time to end users (e.g., page 3: 1-8; page 4: 25-39; page 8: 15-22); and

receiving from a user a first tuning parameter for allocating memory for said monitoring performance (e.g., page 8: 20-31; page 9: 1-23).

iSeries-Arnold does not explicitly disclose *a second tuning parameter for specifying time out for in-flight units of work.*

However, in an analogous art, iSeries-Blankertz further discloses *a second tuning parameter for specifying time out for in-flight units of work (e.g., page 66, section 4.9.4, Time slice parameter and tuning).*

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine iSeries-Blankertz's teaching into iSeries-Arnold's teaching. One would have been motivated to do so to optimize or improve performance as suggested by iSeries-Arnold (e.g., page 9: 15-23) and/or to provide appropriate time for completing a transaction, reduce the number of times the job enters and leaves main storage as suggested by iSeries-Blankertz (e.g., page 67: 1-14).

Claim 6:

iSeries-Arnold discloses *a system for monitoring a computer software system by reading log records written by said software system to determine performance of said software system relative to response time to end users, comprising:*

a first user actuated tuning knob for allocating space in memory for performance monitoring (e.g., page 8, Table 1; page 9: 1-23); and

a transaction monitor responsive to said first user actuated tuning knobs for accumulating in synonym chain cells in said space timing statistics for a plurality of said in-flight units of work (e.g., page 3, Figure 1, page 3: 1-8, page 4: 25-39; page 8: 15-22).

iSeries-Arnold does not explicitly disclose *a second user actuated tuning knob for a specifying time out value for in-flight units of work.*

However, in an analogous art, iSeries-Blankertz further discloses *a second user actuated tuning knob for a specifying time out value for in-flight units of work (e.g., page 66, section 4.9.4, Time slice parameter and tuning).*

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine iSeries-Blankertz's teaching into iSeries-Arnold's teaching. One would have been motivated to do so to optimize or improve performance as suggested by iSeries-Arnold (e.g., page 9: 15-23) and/or to provide appropriate time for completing a transaction, reduce the number of times the job enters and leaves main storage as suggested by iSeries-Blankertz (e.g., page 67: 1-14).

Claim 8:

iSeries-Arnold discloses *a program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for monitoring a computer software system by reading log records written by said software system to determine performance of said software system relative to response time to end users (e.g., page 3, Figure 1, Sample Trace Profile Output, related text in pp.2-3), said method comprising:*

adjustably tuning performance evaluation bias between processor and memory consumption (e.g., page 8, Table 1 and related text);

responsive to said bias, monitoring performance of said computer software system with respect to transaction time parameters (e.g., page 3: 1-8; page 4: 25-39; page 8: 15-22) and

receiving from a user a first tuning parameter for allocating memory for said monitoring performance (e.g., page 8: 20-31; page 9: 1-23).

iSeries-Arnold does not explicitly disclose *a second tuning parameter for specifying time out for in-flight units of work.*

However, in an analogous art, iSeries-Blankertz further discloses *a second tuning parameter for specifying time out for in-flight units of work (e.g., page 66, section 4.9.4, Time slice parameter and tuning).*

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine iSeries-Blankertz's teaching into iSeries-Arnold's teaching. One would have been motivated to do so as set forth in claim 1 above.

Claim 13:

iSeries-Arnold discloses *a computer program storage device for storing programming instructions for monitoring a computer software system by reading log records written by said software system to determine performance of said software system relative to response time to end users according to the method (e.g., page 3, Figure 1) comprising:*

first program instructions for adjustably tuning performance evaluation bias by a software system monitor between processor and memory consumption (e.g., page 8, Table 1 and related text); and

second program instructions, responsive to said bias, for monitoring performance of said computer software system with respect to transaction time parameters (e.g., page 3: 1-8; page 4: 25-39; page 8: 15-22); and

wherein said first and second program instructions are recorded on said storage device (e.g., page 8: 1-31; page 9: 1-23; pp.2-3).

iSeries-Arnold does not explicitly disclose a second tuning parameter for specifying time out for in-flight units of work.

However, in an analogous art, iSeries-Blankertz further discloses a second tuning parameter for specifying time out for in-flight units of work (e.g., page 66, section 4.9.4, Time slice parameter and tuning).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine iSeries-Blankertz's teaching into iSeries-Arnold's teaching. One would have been motivated to do so as set forth in claim 1 above.

10. Claims 1, 6, 8, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Tuning Garbage Collection for Java and WebSphere on iSeries" to Arnold (art made of record, hereinafter "iSeries-Arnold") in view of US Patent No. 6,687,735 to Logston (art made of record, hereinafter "Logston").

Claim 1:

iSeries-Arnold discloses a method for monitoring a computer software system by reading log records written by said software system to determine performance of said software system relative to response time to end users (e.g., page 3, Figure 1, Sample Trace Profile Output, related text in pp.2-3), comprising:

adjustably tuning performance evaluation bias computer software monitoring system between processor and memory consumption (e.g., page 8, Table 1, Rule of Thumb for initial heap size and numbers of processors, related text in page 8);

responsive to said bias, monitoring performance of said computer software system with respect to transaction time parameters including said response time to end users (e.g., page 3: 1-8; page 4: 25-39; page 8: 15-22); and

receiving from a user a first tuning parameter for allocating memory for said monitoring performance (e.g., page 8: 20-31; page 9: 1-23).

iSeries-Arnold does not explicitly disclose a second tuning parameter for specifying time out for in-flight units of work.

However, in an analogous art, Logston further discloses a second tuning parameter for specifying time out for in-flight units of work (e.g., col.26: 14 – col.27:7).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Logston's teaching into iSeries-Arnold's teaching. One would have been motivated to do so to optimize or improve performance as suggested by iSeries-Arnold (e.g., page 9: 15-23) and to balance the sytem workload, assure optimum distributed application software system as suggested by Logston (e.g., col.26: 2-41).

Claim 6:

iSeries-Arnold discloses a system for monitoring a computer software system by reading log records written by said software system to determine performance of said software system relative to response time to end users, comprising:

a first user actuated tuning knob for allocating space in memory for performance monitoring (e.g., page 8, Table 1; page 9: 1-23); and

a transaction monitor responsive to said first user actuated tuning knobs for accumulating in synonym chain cells in said space timing statistics for a plurality of said in-flight units of work (e.g., page 3, Figure 1, page 3: 1-8, page 4: 25-39; page 8: 15-22).

iSeries-Arnold does not explicitly disclose a second user actuated tuning knob for a specifying time out value for in-flight units of work.

However, in an analogous art, Logston further discloses *a second user actuated tuning knob for a specifying time out value for in-flight units of work* (e.g., col.26: 14 – col.27:7).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Logston's teaching into iSeries-Arnold's teaching. One would have been motivated to do so to optimize or improve performance as suggested by iSeries-Arnold (e.g., page 9: 15-23) and to balance the sytem workload, assure optimum distributed application software system as suggested by Logston (e.g., col.26: 2-41).

Claim 8:

iSeries-Arnold discloses *a program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for monitoring a computer software system by reading log records written by said software system to determine performance of said software system relative to response time to end users* (e.g., page 3, Figure 1, Sample Trace Profile Output, related text in pp.2-3), *said method comprising:*

adjustably tuning performance evaluation bias between processor and memory consumption (e.g., page 8, Table 1 and related text);

responsive to said bias, monitoring performance of said computer software system with respect to transaction time parameters (e.g., page 3: 1-8; page 4: 25-39; page 8: 15-22) and

receiving from a user a first tuning parameter for allocating memory for said monitoring performance (e.g., page 8: 20-31; page 9: 1-23).

iSeries-Arnold does not explicitly disclose *a second tuning parameter for specifying time out for in-flight units of work*.

However, in an analogous art, Logston further discloses *a second tuning parameter for specifying time out for in-flight units of work* (e.g., col.26: 14 – col.27:7).

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It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Logston's teaching into iSeries-Arnold's teaching. One would have been motivated to do so as set forth in claim 1 above.

Claim 13:

iSeries-Arnold discloses *a computer program storage device for storing programming instructions for monitoring a computer software system by reading log records written by said software system to determine performance of said software system relative to response time to end users according to the method (e.g., page 3, Figure 1) comprising:*

first program instructions for adjustably tuning performance evaluation bias by a software system monitor between processor and memory consumption (e.g., page 8, Table 1 and related text); and

second program instructions, responsive to said bias, for monitoring performance of said computer software system with respect to transaction time parameters (e.g., page 3: 1-8; page 4: 25-39; page 8: 15-22); and

wherein said first and second program instructions are recorded on said storage device (e.g., page 8: 1-31; page 9: 1-23; pp.2-3).

iSeries-Arnold does not explicitly disclose *a second tuning parameter for specifying time out for in-flight units of work.*

However, in an analogous art, Logston further discloses *a second tuning parameter for specifying time out for in-flight units of work (e.g., col.26: 14 – col.27:7).*

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Logston's teaching into iSeries-Arnold's teaching. One would have been motivated to do so as set forth in claim 1 above.

Allowable Subject Matter

12. Claims 4-5, 7, and 11-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 4:

The prior art of record, either alone or in combination, does not disclose the claimed limitations such as:

“initializing said memory with an in-flight transactions vector table for anchoring synonym chains of in-flight transaction cells;

accumulating time statistics for in-flight transactions in said in-flight transaction cells;

initializing said memory with a completed transactions table for storing time statistics for completed transactions;

receiving from said computer application software system a transaction log record for a unit of work;

hashing said first transaction log record to select from said vector table an anchor to an in-flight transaction cells chain corresponding to said unit of work;

searching said in-flight transaction cells chain for said unit of work;

responsive to finding said unit of work in said in-flight transaction cells chain, capturing to said in-flight transaction cell timing statistics from said transaction log record;

responsive to not finding said unit of work in said in-flight transaction cells chain, chaining a new in-flight transaction cell to said chain and capturing to said new in-flight transaction cell timing statistics from said transaction log record; and

determining if said transaction log record completes a transaction and, if so, updating said completed transactions table with timing statistics for said transaction and removing said in-flight transaction cell from said in-flight transaction cells chain.”

Claim 4 is dependent on independent claim 1, which would be allowable if rewritten in independent form including all of the limitations of the base claim 1.

Claim 5:

The prior art of record, either alone or in combination, does not disclose the claimed limitations such as:

"initializing said memory with an in-flight transactions vector table for anchoring synonym chains of in-flight transaction cells; accumulating time statistics for in-flight transactions in said in-flight transaction cells;

...

determining responsive to said second tuning parameter if a selected unit of work being accumulated in a selected in-flight transaction cell has timed out, and if so removing from said selected in-flight transaction cell from said in-flight transaction cell chain and selectively updating said completed transactions table with timing statistics for said selected unit of work."

Claim 5 is dependent on independent claim 1, which would be allowable if rewritten in independent form including all of the limitations of the base claim 1.

Claim 7:

The prior art of record, either alone or in combination, does not disclose the claimed limitations such as:

"said memory including an in-flight transactions vector table for anchoring synonym chains of in-flight transaction cells; said in-flight transaction cells for accumulating time statistics for in-flight transactions;

...

said monitor further for determining responsive to said second tuning knob if a selected unit of work being accumulated in a selected in-flight transaction cell has timed out, and if so removing from said selected in-flight transaction cell from said in-flight transaction cell chain and selectively updating said completed transactions table with timing statistics for said selected unit of work."

Claim 7 is dependent on independent claim 6, which would be allowable if rewritten in independent form including all of the limitations of the base claim 6.

Claim 11:

The prior art of record, either alone or in combination, does not disclose the claimed limitations such as:

“initializing said memory with an in-flight transactions vector table for anchoring synonym chains of in-flight transaction cells; accumulating time statistics for in-flight transactions in said in-flight transaction cells;

...

determining if said transaction log record completes a transaction and, if so, updating said completed transactions table with timing statistics for said transaction and removing said in-flight transaction cell from said in-flight transaction cells chain.”

Claim 11 is dependent on independent claim 8, which would be allowable if rewritten in independent form including all of the limitations of the base claim 8.

Claim 12:

The prior art of record, either alone or in combination, does not disclose the claimed limitations such as:

“initializing said memory with an in-flight transactions vector table for anchoring synonym chains of in-flight transaction cells;

...

determining responsive to said second tuning parameter if a selected unit of work being accumulated in a selected in-flight transaction cell has timed out, and if so removing from said selected in-flight transaction cell from said in-flight transaction cell chain and selectively updating said completed transactions table with timing statistics for said selected unit of work.”

Claim 12 is dependent on independent claim 8, which would be allowable if rewritten in independent form including all of the limitations of the base claim 8.

13. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone is (571) 272 8570. The examiner can normally be reached on the first Monday of the bi-week, and every Tuesday, Thursday, and Friday from 6:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

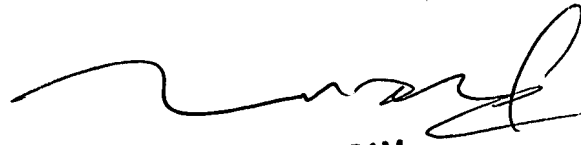
Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao



TUAN DAM
SUPERVISORY PATENT EXAMINER